

# Claims

- [c1] 1. A method for remote booting a computer, comprising:  
executing a basic input output system (BIOS) and determining whether to execute a remote boot procedure;  
downloading and executing a loader program when the remote boot procedure is executed;  
downloading a configuration file, wherein the configuration file comprising a size of an allocated memory and a file list;  
allocating a memory block on the computer according to the size of the allocated memory and installing a file system in the memory block; and  
downloading a file to the file system according to the file list.
- [c2] 2. The method of claim 1, wherein after the step of downloading the file to the file system according to the file list, further comprising:  
installing a virtual disk drive in the computer according to the file system and booting the computer via the virtual disk drive.
- [c3] 3. The method of claim 1, wherein the file system comprises a boot sector, a file allocation table, a directory,

and the file.

[c4] 4. The method of claim 1, wherein the step of determining whether to execute a remote boot procedure depends on a setting of the BIOS.

[c5] 5. A computer suitable of remote boot, comprising:  
a network boot device for downloading a loader program via a network, wherein the loader program downloads a configuration file having a size of an allocated memory and a file list, the loader program setups a memory block on the computer according to the size of the allocated memory and setups a file system in the memory block, and a file is downloaded into the file system according to the file list.

[c6] 6. The computer of claim 5, wherein the file is used to install a virtual disk drive in the computer, and the virtual disk drive boots the computer.

[c7] 7. The computer of claim 5, wherein the network boot device comprises a boot read only memory (Boot ROM) on a network card.

[c8] 8. The computer of claim 5, wherein the network boot device comprises a preboot execution environment (PXE) standard module.

- [c9] 9. The computer of claim 5, wherein the network boot device comprises an stand alone system.
- [c10] 10. The computer of claim 5, wherein the file system comprises a boot sector, a file allocation table, a directory, and the file.
- [c11] 11. A server device for remote boot, comprising:  
a server; and  
a network boot device for downloading a loader program via a network, wherein the loader program downloads a configuration file having a size of an allocated memory and a file list, the loader program setups a memory block on the server device according to the size of the allocated memory and setups a file system in the memory block, and a file is downloaded into the file system according to the file list.
- [c12] 12. The server device of claim 11, wherein the file is used to install a virtual disk drive in the server device and the virtual disk drive boots the server device.
- [c13] 13. The server device of claim 11, wherein the server device comprises a rack mountable server.
- [c14] 14. The server device of claim 11, wherein the server device comprises a blade server.

- [c15] 15. The server device of claim 11, wherein the server device comprises a double-CPU server.
- [c16] 16. The server device of claim 11, wherein the network boot device comprises a boot read only memory (Boot ROM) on a network card.
- [c17] 17. The server device of claim 11, wherein the network boot device comprises a preboot execution environment (PXE) standard module.
- [c18] 18. The server device of claim 11, wherein the network boot device comprises an stand alone system.
- [c19] 19. The server device of claim 11, wherein the file system comprises a boot sector, a file allocation table, a directory, and the file.